

2/34/1 (Item 1 from file: 345)

48371611 Family ID: 18371612
 <No. of Patents: 9> <No. of Countries: 4>
 <No. of Legal Status: 16>

Patent Basic (No,Kind,Date): EP 619677 A2 19941012

System for scrambling a digital video signal (English)
Systeme pour embrouiller un signal video numerique (French)
System zur Verschlüsselung eines digitalen Videosignals (German)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (JP)
 Author (Inventor): IBARAKI SUSUMU (JP); KATTA NOBORU (JP); NAKAMURA SEIJI (JP); MURAKAMI HIROKI (JP)

Record Type: Legal Status; Abstract; Cited Refs

Patent Family:

Patent No	Kd	Date	Applic No	Kd	Date	Wk	Added
EP 619677	A2	19941012	EP 1994105449	A	19940408	199509	(B)
EP 619677	A3	19950308	EP 1994105449	A	19940408	199520	
JP 6296175	A	19941021	JP 199383085	A	19930409	199510	
JP 6296279	A	19941021	JP 199383081	A	19930409	199510	
JP 6303232	A	19941028	JP 199388394	A	19930415	199519	
JP 7023367	A	19950124	JP 1993150056	A	19930622	199520	
JP 7111645	A	19950425	JP 1993254184	A	19931012	199523	
KR 184313	B1	19990501	KR 19947321	A	19940408	200010	
US 5546461	A	19960813	US 1994225330	A	19940408	199634	

Priority Data (No,Kind,Date):

JP 199383081	A	19930409
JP 199383085	A	19930409
JP 199388394	A	19930415
JP 1993150056	A	19930622
JP 1993254184	A	19931012

***** EUROPEAN PATENT OFFICE (EP) *****

EUROPEAN PATENT OFFICE (EP) PATENT(S):

Patent (No,Kind,Date): EP 619677 A2 19941012
 System for scrambling a digital video signal (English)
 Systeme pour embrouiller un signal video numerique (French)
 System zur Verschlüsselung eines digitalen Videosignals (German)
 Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (JP)
 Author (Inventor): IBARAKI SUSUMU (JP); KATTA NOBORU (JP); NAKAMURA

SEIJI (JP); MURAKAMI HIROKI (JP)

Priority (No,Kind,Date): JP 199383081 A 19930409; JP 199383085 A
 19930409; JP 199388394 A 19930415; JP 1993150056 A 19930622
 ; JP 1993254184 A 19931012

Applie (No,Kind,Date): EP 1994105449 A 19940408

Designated States:

C: DE FR GB

ECLA: H04N-005/765; H04N-007/167D; H04N-009/804B3

IPC + Level	Value	Position	Status	Version	Action	Source	Office
v.	5 main:	H04N-005/92					
v.	5	: H04N-007/16					
v.	8 adv :	H04N-0005/765	A I	R 20060101	20051008	M EP	
v.	8 adv :	H04N-0007/167	A I	R 20060101	20051008	M EP	
v.	8 adv :	H04N-0009/804	A I	R 20060101	20051008	M EP	
v.	8 core:	H04N-0005/765	C I	R 20060101	20051008	M EP	
v.	8 core:	H04N-0007/167	C I	R 20060101	20051008	M EP	
v.	8 core:	H04N-0009/804	C I	R 20060101	20051008	M EP	

Date of Availability: 19941012 Unexamined printed without grant

Language of Document: English; French; German

Update Week: Backfile (First Week Added: 199509)

Patent (No,Kind,Date): EP 619677 A3 19950308

System for scrambling a digital video signal (English)
 Systeme pour embrouiller un signal video numerique (French)
 System zur Verschlusselung eines digitalen Videosignals (German)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (JP)

Author (Inventor): IBARAKI SUSUMU (JP); KATTA NOBORU (JP); NAKAMURA SEIJI (JP); MURAKAMI HIROKI (JP)

Priority (No,Kind,Date): JP 199383081 A 19930409; JP 199383085 A
 19930409; JP 199388394 A 19930415; JP 1993150056 A 19930622
 ; JP 1993254184 A 19931012

Applie (No,Kind,Date): EP 1994105449 A 19940408

Designated States:

C: DE FR GB

ECLA: H04N-005/765; H04N-007/167D; H04N-009/804B3

IPC + Level	Value	Position	Status	Version	Action	Source	Office
v.	5 main:	H04N-005/92					
v.	5	: H04N-007/16					
v.	8 adv :	H04N-0005/765	A I	R 20060101	20051008	M EP	
v.	8 adv :	H04N-0007/167	A I	R 20060101	20051008	M EP	
v.	8 adv :	H04N-0009/804	A I	R 20060101	20051008	M EP	
v.	8 core:	H04N-0005/765	C I	R 20060101	20051008	M EP	
v.	8 core:	H04N-0007/167	C I	R 20060101	20051008	M EP	
v.	8 core:	H04N-0009/804	C I	R 20060101	20051008	M EP	

Language of Document: English; French; German

Update Week: Backfile (First Week Added: 199520)

EUROPEAN PATENT OFFICE (EP) LEGAL STATUS:

Legal Status (Patent No,Kind,Gazette Date,Code,Text):

EP 619677 A2 19941012 EP AK (+) DESIGNATED CONTRACTING STATES:
(BENANNTE VERTRAGSSTAATEN)
Designated States: DE FR GB
Last Revised by EPO: 20030101
Update Week: Backfile

EP 619677 A2 19941012 EP 17P (+) REQUEST FOR EXAMINATION FILED
(PRUEFUNGSANTRAG GESTELLT)
Effective Date: 19940408
Last Revised by EPO: 20030101
Update Week: Backfile

EP 619677 A2 19950308 EP AK (+) DESIGNATED CONTRACTING STATES:
(BENANNTE VERTRAGSSTAATEN)
Designated States: DE FR GB
Last Revised by EPO: 20030101
Update Week: Backfile

EP 619677 A2 19970827 EP 17Q (+) FIRST EXAMINATION REPORT (ERSTER PRUEFUNGSBESCHEID)
Effective Date: 19970709
Last Revised by EPO: 20030101
Update Week: Backfile

EP 619677 A2 19990714 EP 18R (-) REFUSED (ZURUECKGEWIESEN)
Effective Date: 19990225
Last Revised by EPO: 20030101
Update Week: Backfile

***** JAPAN (JP) *****

JAPAN (JP) PATENT(S):

Patent (No,Kind,Date): JP 6296175 A 19941021

SCRAMBLER AND DESCRAMBLER (English)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD

Author (Inventor): IBARAKI SUSUMU; KATSUTA NOBORU; NAKAMURA SEIJI;
MURAKAMI HIRONORI

Priority (No,Kind,Date): JP 199383085 A 19930409

Applc (No,Kind,Date): JP 199383085 A 19930409

IPC + Level Value Position Status Version Action Source Office

v. 5 main: H04L-009/06

v. 5 : G11B-020/10

v. 5 : H04L-009/14

v. 8 adv : G11B-0020/10 A I F R 20060101 20051220 M JP

v. 8 adv : H04L-0009/06 A I R 20060101 20051110 M EP

v. 8 adv : H04L-0009/14 A I R 20060101 20051110 M EP

v. 8 adv : H04L-0009/20	A I L R 20060101 20051220 M JP
v. 8 core: G11B-0020/10	C I F R 20060101 20051220 M JP
v. 8 core: H04L-0009/06	C I R 20060101 20051110 M EP
v. 8 core: H04L-0009/14	C I R 20060101 20051110 M EP
v. 8 core: H04L-0009/18	C I L R 20060101 20051220 M JP

Date of Availability: 19941021 Unexamined printed without grant

Language of Document: Japanese

Update Week: Backfile (First Week Added: 199510)

Patent (No,Kind,Date): JP 6296279 A 19941021

SCRAMBLING DEVICE AND DESCRAMBLING DEVICE (English)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD

Author (Inventor): IBARAKI SUSUMU; KATSUTA NOBORU; NAKAMURA SEIJI;
MURAKAMI HIRONORI

Priority (No,Kind,Date): JP 199383081 A 19930409

Applic (No,Kind,Date): JP 199383081 A 19930409

IPC + Level Value Position Status Version Action Source Office

v. 5 main: H04N-007/16	
v. 5 : G11B-020/10	
v. 8 adv : G11B-0020/10	A I F R 20060101 20051220 M JP
v. 8 adv : H04N-0007/167	A I L R 20060101 20051220 M JP
v. 8 adv : H04N-0007/169	A I L R 20060101 20051220 M JP
v. 8 core: G11B-0020/10	C I F R 20060101 20051220 M JP
v. 8 core: H04N-0007/167	C I L R 20060101 20051220 M JP
v. 8 core: H04N-0007/169	C I L R 20060101 20051220 M JP

Date of Availability: 19941021 Unexamined printed without grant

Language of Document: Japanese

Update Week: Backfile (First Week Added: 199510)

Patent (No,Kind,Date): JP 6303232 A 19941028

SCRAMBLING METHOD AND SCRAMBLING DEVICE (English)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD

Author (Inventor): IBARAKI SUSUMU; KATSUTA NOBORU; NAKAMURA SEIJI;
MURAKAMI HIRONORI

Priority (No,Kind,Date): JP 199388394 A 19930415

Applic (No,Kind,Date): JP 199388394 A 19930415

IPC + Level Value Position Status Version Action Source Office

v. 5 main: H04L-009/34	
v. 5 : G11B-020/10	
v. 5 : H04N-007/16	
v. 8 adv : G11B-0020/10	A I F R 20060101 20051220 M JP
v. 8 adv : H04L-0009/34	A I L R 20060101 20051220 M JP
v. 8 adv : H04N-0007/167	A I L R 20060101 20051220 M JP
v. 8 adv : H04N-0007/169	A I L R 20060101 20051220 M JP
v. 8 core: G11B-0020/10	C I F R 20060101 20051220 M JP
v. 8 core: H04L-0009/34	C I L R 20060101 20051220 M JP
v. 8 core: H04N-0007/167	C I L R 20060101 20051220 M JP
v. 8 core: H04N-0007/169	C I L R 20060101 20051220 M JP

Date of Availability: 19941028 Unexamined printed without grant
Language of Document: Japanese
Update Week: Backfile (First Week Added: 199519)

Patent (No,Kind,Date): JP 7023367 A 19950124
METHOD FOR SCRAMBLING AND ITS DEVICE (English)
Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD
Author (Inventor): IBARAKI SUSUMU; KATSUTA NOBORU; NAKAMURA SEIJI;
MURAKAMI HIRONORI
Priority (No,Kind,Date): JP 1993150056 A 19930622
Applc (No,Kind,Date): JP 1993150056 A 19930622
IPC + Level Value Position Status Version Action Source Office
v. 6 main: H04N-007/16
v. 6 : H04L-009/00
v. 6 : H04L-009/06
v. 6 : H04L-009/10
v. 6 : H04L-009/12
v. 8 adv : H04K-0001/00 A I F R 20060101 20051220 M JP
v. 8 adv : H04L-0009/00 A I R 20060101 20051110 M EP
v. 8 adv : H04L-0009/06 A I R 20060101 20051110 M EP
v. 8 adv : H04L-0009/10 A I R 20060101 20051110 M EP
v. 8 adv : H04L-0009/12 A I R 20060101 20051110 M EP
v. 8 adv : H04N-0007/167 A I L R 20060101 20051220 M JP
v. 8 core: H04K-0001/00 C I F R 20060101 20051220 M JP
v. 8 core: H04L-0009/00 C I R 20060101 20051110 M EP
v. 8 core: H04L-0009/06 C I R 20060101 20051110 M EP
v. 8 core: H04L-0009/10 C I R 20060101 20051110 M EP
v. 8 core: H04L-0009/12 C I R 20060101 20051110 M EP
v. 8 core: H04N-0007/167 C I L R 20060101 20051220 M JP
Date of Availability: 19950124 Unexamined printed without grant
Language of Document: Japanese
Update Week: Backfile (First Week Added: 199520)

Patent (No,Kind,Date): JP 7111645 A 19950425
SCRAMBLE DEVICE AND DESCRAMBLE DEVICE (English)
Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD
Author (Inventor): IBARAKI SUSUMU; KATSUTA NOBORU; NAKAMURA SEIJI;
MURAKAMI HIRONORI
Priority (No,Kind,Date): JP 1993254184 A 19931012
Applc (No,Kind,Date): JP 1993254184 A 19931012
IPC + Level Value Position Status Version Action Source Office
v. 6 main: H04N-007/16
v. 8 adv : H04N-0007/167 A I F R 20060101 20051220 M JP
v. 8 core: H04N-0007/167 C I F R 20060101 20051220 M JP
Date of Availability: 19950425 Unexamined printed without grant
Language of Document: Japanese
Update Week: Backfile (First Week Added: 199523)

***** KOREA, REPUBLIC (KR) *****

KOREA, REPUBLIC (KR) PATENT(S):

Patent (No,Kind,Date): KR 184313 B1 19990501

SYSTEM FOR SCRAMBLING A DIGITAL VIDEO SIGNAL (English)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (JP)

Author (Inventor): IBARAKI SUSUMU (JP); KATTA NOBORU (JP); NAKAMURA SEIJI (JP); MURAKAMI HIROKI (JP)

Priority (No,Kind,Date): JP 199383081 A 19930409; JP 199383085 A 19930409; JP 199388394 A 19930415; JP 1993150056 A 19930622 ; JP 1993254184 A 19931012

Applc (No,Kind,Date): KR 19947321 A 19940408

ECLA: H04N-005/765; H04N-007/167D; H04N-009/804B3

IPC + Level Value Position Status Version Action Source Office

v. 6 main: H04N-007/24

v. 8 adv : H04N-0005/765 A I R 20060101 20051008 M EP

v. 8 adv : H04N-0007/167 A I R 20060101 20051008 M EP

v. 8 adv : H04N-0009/804 A I R 20060101 20051008 M EP

v. 8 core: H04N-0005/765 C I R 20060101 20051008 M EP

v. 8 core: H04N-0007/167 C I R 20060101 20051008 M EP

v. 8 core: H04N-0009/804 C I R 20060101 20051008 M EP

Date of Availability: 19990501 Examined printed without grant

Language of Document: Korean

Update Week: 200644 (First Week Added: 200010)

***** UNITED STATES OF AMERICA (US) *****

UNITED STATES OF AMERICA (US) PATENT(S):

Patent (No,Kind,Date): US 5546461 A 19960813

Scramble system for use in digital video signal recording and reproducing system or transmission and receiving system, comprising scramble apparatus and descramble apparatus (English)

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (JP)

Author (Inventor): IBARAKI SUSUMU (JP); KATTA NOBORU (JP); NAKAMURA SEIJI (JP); MURAKAMI HIROKI (JP)

Priority (No,Kind,Date): JP 199383081 A 19930409; JP 199383085 A 19930409; JP 199388394 A 19930415; JP 1993150056 A 19930622 ; JP 1993254184 A 19931012

Applc (No,Kind,Date): US 1994225330 A 19940408

National Class: 380 20; X380 5; X380 20; X380 37

ECLA: H04N-005/765; H04N-007/167D; H04N-009/804B3

IPC + Level Value Position Status Version Action Source Office

v. 6 main: H04N-007/16

v. 6 : H04K-001/04

v. 8 adv : H04N-0005/765 A I R 20060101 20051008 M EP

v. 8 adv : H04N-0007/167 A I R 20060101 20051008 M EP

v. 8 adv : H04N-0009/804 A I R 20060101 20051008 M EP

v. 8 core: H04N-0005/765 C I R 20060101 20051008 M EP

v. 8 core: H04N-0007/167 C I R 20060101 20051008 M EP

v. 8 core: H04N-0009/804 C I R 20060101 20051008 M EP

Date of Availability: 19960813 Printed with grant

Language of Document: English

Update Week: Backfile (First Week Added: 199634)

UNITED STATES OF AMERICA (US) LEGAL STATUS:

Legal Status (Patent No, Kind, Gazette Date, Code, Text):

US 5546461 A 19940520 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): MATSUSHITA ELECTRIC INDUSTRIAL
CO., LTD. 1006 OAZA

Effective Date: 19940516

Last Revised by EPO: 20030101

Update Week: Backfile

US 5546461 A 19940520 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): IBARAKI, SUSUMU

Effective Date: 19940516

Last Revised by EPO: 20030101

Update Week: Backfile

US 5546461 A 19940520 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): KATTA, NOBORU

Effective Date: 19940516

Last Revised by EPO: 20030101

Update Week: Backfile

US 5546461 A 19940520 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): NAKAMURA, SEIJI

Effective Date: 19940516

Last Revised by EPO: 20030101

Update Week: Backfile

US 5546461 A 19940520 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): MURAKAMI, HIROKI

Effective Date: 19940516

Last Revised by EPO: 20030101

Update Week: Backfile

US 5546461 A 19940606 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): MATSUSHITA ELECTRIC INDUSTRIAL

CO., LTD. 1006 OAZA
Effective Date: 19940519
Last Revised by EPO: 20030101
Update Week: Backfile

US 5546461 A 19940606 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): FUJITA, TATSUO
Effective Date: 19940519
Last Revised by EPO: 20030101
Update Week: Backfile

US 5546461 A 19940606 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): TOKUMITSU, SYUZO
Effective Date: 19940519
Last Revised by EPO: 20030101
Update Week: Backfile

US 5546461 A 19940606 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): NISHIDA, HIROFUMI
Effective Date: 19940519
Last Revised by EPO: 20030101
Update Week: Backfile

US 5546461 A 19940606 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): SUZUKI, TADASHI
Effective Date: 19940519
Last Revised by EPO: 20030101
Update Week: Backfile

US 5546461 A 19940606 US AS02 ASSIGNMENT OF ASSIGNOR'S
INTEREST

Assignee(s): ONO, Y
Effective Date: 19940519
Last Revised by EPO: 20030101
Update Week: Backfile

2/34/2 (Item 2 from file: 351)

0006916073 & & Drawing available

WPI Acc no: 1994-312050/199439

Scrambling system for digital video signals - applies scrambling and descrambling process to recording and reproducing system or transmission and receiving system where frame is divided into blocks corresp. to processes

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU); MATSUSHITA ELEC IND CO LTD (MATU); MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: IBARAKI S; KATSUTA N; KATTA N; MURAKAMI H; NAKAMURA S

Patent Family (9 patents, 5 & countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 619677	A2	19941012	EP 1994105449	A	19940408	199439	B
JP 6296175	A	19941021	JP 199383085	A	19930409	199502	E
JP 6296279	A	19941021	JP 199383081	A	19930409	199502	E
JP 6303232	A	19941028	JP 199388394	A	19930415	199503	E
JP 7023367	A	19950124	JP 1993150056	A	19930622	199513	E
JP 7111645	A	19950425	JP 1993254184	A	19931012	199525	E
EP 619677	A3	19950308	EP 1994105449	A	19940408	199542	E
US 5546461	A	19960813	US 1994225330	A	19940408	199638	E
KR 184313	B1	19990501	KR 19947321	A	19940408	200052	E

Priority Applications (no., kind, date): JP 199383081 A 19930409; JP 199383085 A 19930409; JP 199388394 A 19930415; JP 1993150056 A 19930622; JP 1993254184 A 19931012

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
EP 619677	A2	EN	35	25	
Regional Designated States, Original					DE FR GB
JP 6296175	A	JA	10		
JP 6296279	A	JA	11		
JP 6303232	A	JA	11	8	
JP 7023367	A	JA	7		
JP 7111645	A	JA	8		
EP 619677	A3	EN			
US 5546461	A	EN	30	22	

Alerting Abstract EP A2

The system comprises a scrambler (12) for executing a scramble process on the input digital video signal in the identical processing manner using the fundamental video blocks in the identical position in each frame and generates a scrambled signal.

A descrambler (16) carries reverses the scrambling process using the fundamental video blocks of the scrambled signal. The reconstruction process includes an interpolation process for replacing a first fundamental video block with an error with another second fundamental video block located in the same position as that of the first having the error, based on an input digital video signal.

USE/ADVANTAGE - E.g. for VTR, or for system using optical, coaxial or radio links. Correctly executes scrambling process. Prevents original video signal from being obtained from scrambled signal even though image reconstruction using e.g. interpolation, high speed playback or like, is executed after scrambling.

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G11B-0020/10	A	I	F	R	20060101
H04K-0001/00	A	I	F	R	20060101
H04L-0009/00	A	I		R	20060101
H04L-0009/06	A	I		R	20060101
H04L-0009/10	A	I		R	20060101
H04L-0009/12	A	I		R	20060101
H04L-0009/14	A	I		R	20060101
H04L-0009/20	A	I	L	R	20060101
H04L-0009/34	A	I	L	R	20060101
H04N-0005/765	A	I		R	20060101
H04N-0007/167	A	I	F	R	20060101
H04N-0007/167	A	I	L	R	20060101
H04N-0007/167	A	I		R	20060101
H04N-0007/169	A	I	L	R	20060101
H04N-0009/804	A	I		R	20060101
G11B-0020/10	C	I	F	R	20060101
H04K-0001/00	C	I	F	R	20060101

H04L-0009/00	C	I		R	20060101
H04L-0009/06	C	I		R	20060101
H04L-0009/10	C	I		R	20060101
H04L-0009/12	C	I		R	20060101
H04L-0009/14	C	I		R	20060101
H04L-0009/18	C	I	L	R	20060101
H04L-0009/34	C	I	L	R	20060101
H04N-0005/765	C	I		R	20060101
H04N-0007/167	C	I	F	R	20060101
H04N-0007/167	C	I	L	R	20060101
H04N-0007/167	C	I		R	20060101
H04N-0007/169	C	I	L	R	20060101
H04N-0009/804	C	I		R	20060101

ECLA: H04N-005/765, H04N-007/167D, H04N-009/804B3

US Classification, Issued: 38020, 3805, 38020, 38037

Derwent WPI (Dialog® File 351): (c) 2009 Thomson Reuters. All rights reserved.

©1997-2009 Dialog LLC All Rights Reserved - Version
2.5